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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,063	02/25/2004	Tomohisa Higuchi	249256US6X	8923

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EXAMINER
WALTER, CRAIG E

ART UNIT	PAPER NUMBER
2188	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	04/16/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 04/16/2007.

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	Application No.	Applicant(s)
	10/785,063	HIGUCHI, TOMOHISA
Office Action Summary	Examiner	Art Unit	
	Craig E. Walter	2188	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _13 February 2007_.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-19_ is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) _1-3 and 5-19_ is/are rejected.
7) ☒ Claim(s) _4_ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☒ All b) ☐ Some * c) ☐ None of:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. _____.
    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9 January 2007 has been entered.

Status of Claims

2.   Claims 1-19 are pending in the Application.

Claims 1, 9-12 and 17-19 have been amended.

Claims 1-3 and 5-19 are rejected.

Claim 4 is objected to.

Response to Amendment

Applicant's amendments and arguments filed on 9 January 2007 in response to the office action mailed on 30 October 2006 have been fully considered, but they are rendered moot in view in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set
forth in section 102 of this title, if the differences between the subject matter sought to be patented and
the prior art are such that the subject matter as a whole would have been obvious at the time the
invention was made to a person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1, 5, 8-12, 16-19 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Kobayashi (US Patent 5, 378,887).

As for claims 1 and 9-11 Kobayashi teaches an information processing apparatus

(Fig. 5, element 30), (and method, medium and program) including an information

recording medium (Fig. 5, element 32), comprising:

communicating means for communicating data with said information

recording medium (referring to Fig. 5, elements 32, 34 and 36 (and the data

transfer paths associated with these three units) comprise the communication

means; the memory can be written to, or read from via the memory control

section, or the memory may be accessed (i.e. read) by the memory control

section via the read area deciding section) – col. 7, line 62 through col. 8, line 11;

detecting means for detecting any access to said information recording

medium (Fig. 5, element 36 – the memory control section controls access to and

from the memory, therefore it is capable of detecting when the memory is being

accessed – col. 7, line 63 through col. 8, line 11);

determining means for determining whether a result of detection by said

detecting means indicates internal access by said communicating means or

external access from an external apparatus external to the information

processing apparatus (access can occur from a write operation via the external

device (referring to Fig. 5, the external device communicates with the IC card via

the non contact terminal (40), to the modulating and demodulating section (38),

to the memory control section (36) – col. 7, line 63 through col. 8, line 17).

Additionally, the access could be simply result from reading the memory via the

read area deciding section - col. 7, line 63 through col. 8, line 11). Note the

memory control section is capable of making a determination of where the

access is coming from – more specifically, the read area deciding section is used

to decide which area of the memory 32 should be accessed. In order for the

system to function properly, the read area deciding section must compare the

numbers recorded in each respective area in of the memory (either 321 or 322),

and make a determination based on this information which area should be

selected. This information is then sent to the memory control section - col. 8,

lines 63 through col. 9, line 7. Kobayashi clearly sets forth the read area

deciding section as accessing the memory sections to make this determination

(to compare the numbers read from each respective section), therefore he does

teach an "internal access" (i.e. accessing includes both writing to, and *reading*

from, a memory). Kobayashi's memory control section clearly can determine if

the memory access occurs from the external apparatus (the thrust of the

invention is directed to preventing and allowing re-access from the external

source), and clearly it can determine the occurrence of an internal access (i.e.

the data coming from the read area deciding section is a result of internal access

once it receives the critical information on the memory areas); and

access controlling means for controlling the external access from said

external apparatus when said determining means determines that the result of

detection by said detecting means indicates the external access from said

external apparatus (col. 2, line 64 through col. 3, line 11 – the system will

generate an inhibition signal to control access to the memory via the external

device for a predetermined time. The control means can decide weather or not

to permit access from the external device to the main circuit based on

frequencies of access, by uses the information provided by the inhibition signal) -

the memory control section can clearly control access to the memory from the

external apparatus via the re-access circuitry, Kobayashi clearly teaches

controlling the external access when it is determined that the access has

occurred from the external apparatus (i.e. access cannot be controlled unless the

external apparatus is first determined be accessing the memory). Additionally

note, Kobayashi's system does not allow for the data read out of the memory

areas to be written back to the memory (rather it is used as metadata to help

control the data from the external apparatus), hence Kobayashi is controlling

access from the external apparatus via the aid of the data which was accessed

internally).

Though Kobayashi explicitly teaches an information recording medium (Fig. 5,

element 32), and a memory, a control unit, and an antenna (Fig. 5, elements 321/322,

36, 38 and 40 respectively), he fails to teach the information recording medium as comprising each of these elements.

It would have been obvious to one of ordinary skill in the art at the time of the invention for Kobayashi's information recording medium to further include each of these elements as one unit. By doing so, Kobayashi would be able to realize the well-known benefits of multiple component integration including increased speed and decrease in manufacturing cost.

As for claims 12 and 17-19, Kobayashi teaches an information processing apparatus (method, medium and program) including an information recording medium, comprising:

communicating means for communicating data with said information recording medium (referring to Fig. 5, elements 32, 34 and 36 (and the data transfer paths associated with these three units) comprise the communication means; the memory can be written to, or read from via the memory control section, or the memory may be accessed (i.e. read) by the memory control section via the read area deciding section) – col. 7, line 62 through col. 8, line 11;

detecting means for detecting access to said information recording medium (Fig. 5, element 36 – the memory control section controls access to and from the memory, therefore it is capable of detecting when the memory is being accessed – col. 7, line 63 through col. 8, line 11);

determining means for determining whether a result of detection by said detecting means indicates internal access by said communicating means or

external access from an external apparatus (access can occur from a write

operation via the external device (referring to Fig. 5, the external device

communicates with the IC card via the non contact terminal (40), to the

modulating and demodulating section (38), to the memory control section (36) –

col. 7, line 63 through col. 8, line 17). Additionally, the access could be simply

result from reading the memory via the read area deciding section - col. 7, line 63

through col. 8, line 11). Note the memory control section is capable of making a

determination of where the access is coming from; and

informing means for, when said determining means determines that the

result of detection by said detecting means indicates the external access from

said external apparatus, notifying a user of the external access (once the circuit

completes operation based on the access from the external device, an operation

inhibition signal is generated to notify the system that a recent access has

occurred, and the no additional access is to occur until the predetermined time

elapses – col. 2, line 64 through col. 3, line 11).

Please refer to claim 1 for further explanation of Kobayshi's teachings with

respect to these claim limitations.

As for claim 5, Kobayashi teaches informing means for, when said determining

means determines that the result of detection by said detecting means indicates the

external access from said external apparatus, notifying the user of the external access

(once the circuit completes operation based on the access from the external device, an

operation inhibition signal is generated to notify the system that a recent access has

occurred, and the no additional access is to occur until the predetermined time elapses

– col. 2, line 64 through col. 3, line 11).

As for claims 8 and 16, Kobayashi teaches the information recording medium as

being a non contact type IC (Kobayashi's invention is directed towards controlling a non

contact type IC card (see abstract)).

4.   Claims 2-3 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Kobayashi (US Patent 5, 378,887) as applied to claims 1 and 9 above, and in

further view of Masaki et al. (US PG Publication 2002/0188852 A1), hereinafter Masaki.

As for claims 2 and 15, though Kobayashi teaches detecting access to his

information processing apparatus, he fails to teach recording the internal or external

access information as history information on a recording medium.

Masaki however teaches an illegal access monitoring device for an IC card,

which is used to monitor access to the IC card (paragraph 0037, all lines). Note Masaki

specifically refers to storing access information in the IC card (paragraph 0112, all

lines).

As for claim 3, Kobayashi's system is designed such that the access controlling

means refers to the inhibition signal, rather than stored access history information in

order to control external access from the external device. Again Masaki teaches

monitoring access to the card, and storing access information in said card, which may

be referred to a later time to determine if access should be granted or denied based on

the stored access information (see the rejection of claim 2 above).

It would have been obvious to one of ordinary skill in the art at the time of the

invention for Kobayashi to further include Masaki's illegal access monitoring device for

an IC card to his own non-contact IC card. By doing so, Kobayashi would benefit by

increasing the security and integrity of data stored within the card by preventing

unauthorized access to the memory, and further mitigating the threat of reverse

engineering as taught by Masaki in paragraph 0036, all lines.

5.   Claims 6-7 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Kobayashi (US Patent 5, 378,887) as applied to claims 1 and 9 above, and in

further view of Hinker et al. (US Patent 6,351,845 B1), hereinafter Hinker.

As for claims 6-7 and 13-14, though Kobayashi teaches notifying external access

to the memory, he fails to teach notifying the user of the system via a warning display,

sound, light, or vibration. He further fails to teach changing the informing method based

on access source as claimed by Applicant.

Hinker however teaches an apparatus for analyzing memory use in which the

system visually notifies a user when particular types of memory access are occurring

within the system (see abstract). More specifically, Hinker teaches the use of different

colors to designate the specific type of memory access (i.e. red for a read operation,

and green for a write operation) – col. 8, lines 33-35.

It would have been obvious to one of ordinary skill in the art at the time of the

invention for Kobayashi to further include Hinker's apparatus for analyzing memory use

to his own non-contact IC card. By doing so, Kobayashi would benefit by having a

means of visually informing the user of his card as to how frequently the memory is

being accessed, and which access type is taking place. This in turn will help the user

understand data dependencies within the memory as taught by Hinker in col. 3, lines 4-

9. This information, can in turn help a user to understand how the memory is being

accessed, in order to help reduce the number of accesses, hence improving the

memory's efficiency as taught by Hinker in col. 1, line 20-32.

Note that since Kobayashi's system uses the read area deciding section (Fig. 5,

element 34) to read data from the memory, and utilizes a path from elements 40, 38, 36

(Fig. 5) to access the memory (32) from the external device, a read and write operation

would come from a different source, just as claimed by Applicant.

Allowable Subject Matter

6.   Claim 4 is objected to as being dependent upon a rejected base claim, but would

be allowable if rewritten in independent form including all of the limitations of the base

claim and any intervening claims.

7.   The following is a statement of reasons for the indication of allowable subject

matter:

> Though Kobayashi in view of Masaki disclose all of the limitations of claim
>
> 3, they fail to further teach when the history information corresponding to said
>
> external apparatus is not retrieved, displaying a selection screen for allowing
>
> selection of permission or denial of the external access, wherein the recording
>
> means records the history information on a basis of an operation of the selection
>
> screen by a user as recited by Applicant in this claim.

Response to Arguments

8.   Applicant's arguments with respect to claim 1-19 have been considered but they are not persuasive.

As for claim 1, Applicant contends, "the read area deciding section 34 disclosed by the '887 patent does not access the memory 32 and does not send a request to access the memory 32. Rather, the read area deciding section 34 merely indicates to the memory control section 36 which area 321 or 322 in which to read to or write from. The read area deciding section 34 is unable to detect any access to the information recording medium, as required by Claim 1."

This argument however is not persuasive. The claim requires, *inter alia*, "detecting means for detecting any access to said information recording medium". Referring to the '887 patent, the memory control section (Fig. 5, element 36), not the read area deciding section, is the portion that is actually detecting any access to the information recording medium. Note this mapping is consistent with both Examiner's previous and present rejection of the claim (see paragraph 0004 above). The read area deciding section must inherently access the memory (element 32) in order to feed information to the memory control section (note the arrows in Fig. 5 from element 32 to element 34, and subsequently from element 34 to element 36. These arrows indicate the flow of information from the memory to the memory control section, which indicates that the memory has been internally accessed). Also note that the memory control

section detects external access, which may be also construed as "any access" to the memory.

Applicant additionally asserts, "the read area deciding section 34 disclosed by the '887 patent is unable to determine whether the result of the detection by the detecting means indicates internal access by the communicating means or external access from an external apparatus that is external to the information processing apparatus, as required by Claim 1." Applicant concludes, "[e]ven if receiving information from a memory is construed to mean detecting access to the information recording medium, it cannot, under any reasonable interpretation, be construed to read on determining means for determining whether result of detecting by the detection means indicates external access by a communication means or external access from an external apparatus external to the information processing apparatus, as required by Claim 1.

This argument however is not persuasive. Examiner maintains that Kobayashi does in fact teach the detecting and determining means as recited in this claim. More specifically, the read area deciding section (hereinafter RADS) is used to decide which area of the memory 32 should be accessed. In order for the system to function properly, the RADS must compare the numbers recorded in each respective area in of the memory (either 321 or 322), and make a determination based on this information which area should be selected. This information is then sent to the memory control section - col. 8, lines 63 through col. 9, line 7. Note again it is the memory control section, not that RADS that is making the determination. This assertion is consistent

with Examiner's previous and present rejection of the claim (see paragraph 0004

above). Kobayashi clearly sets forth the RADS as accessing the memory sections to

make this determination (to compare the numbers read from each respective section),

therefore he does teach an "internal access" (i.e. accessing includes both writing to, and

reading from, a memory). Kobayashi's memory control section clearly can determine if

the memory access occurs from the external apparatus (the thrust of the invention is

directed to preventing and allowing re-access from the external source), and clearly it

can determine the occurrence of an internal access (i.e. the data coming from the

RADS is a result of internal access once it receives the critical information on the

memory areas), hence Kobayashi clearly teaches a "determining means for determining

whether a result of detection by said detecting means indicates internal access by said

communicating means or external access from an external apparatus external to the

information processing apparatus" as recited in this claim. Absent determining if the

external device is accessing the memory, Kobayashi's system would not function;

therefore his teachings clearly anticipate this particular limitation.

Lastly, Applicant asserts, "the read area deciding section 34 has no way of

knowing whether the IC card is being accessed by an external apparatus external to the

information processing apparatus or whether it is being accessed by the communication

means. Rather, the read area deciding section, at most, is aware that it has read data

from the memory 32. But by merely reading data from a memory, the read area deciding

section does not detect access to the information recording medium. It only "detects"

that it has read data from the memory. Other access to the information recording

medium is not detected, and cannot be detected, by the read area deciding section 34."

This argument again is not persuasive. Examiner maintains that the memory

control section, not the RADS is responsible for the determination. The memory control

section receives data from both the RADS and externally via the antenna. The memory

control section must inherently determine if the data received is internal with respect to

the information processing apparatus (i.e. via the RADS), or received externally via the

antenna, else his system would be incapable of inhibiting re-access via the external port

which is the salient feature of his invention (see col. 2, line 64 through col. 3, line 25).

9.   Applicant's argument that claims that depend on claim 1 are allowable is

rendered moot, as Examiner maintains that Kobayashi renders claim 1 obvious per the

arguments and rejections set forth *supra*.

10.   Applicant's argument that claims 9-12 and 17-19 are allowable for the same

reasons as claim 1 is rendered moot. Examiner maintains that Kobayashi renders

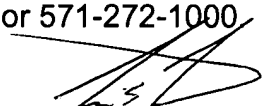these claims obvious per the arguments and rejections set forth *supra*.

11.   Applicant's argument that claims 2, 3, 6, 7 and 13-15 are allowable since the '845

patent (Hinker), and the '852 application (Masaki) fail to cure the deficiencies of

Kobayashi is rendered moot, as Examiner maintains that Kobayashi renders claims 1,

5, 8-12 and 16-19 obvious per the arguments and rejections set forth *supra*.

Conclusion

12.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig E. Walter whose telephone number is (571) 272-8154. The examiner can normally be reached on 8:30a - 5:00p M-F.
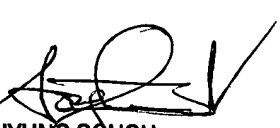
13.   If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Sough can be reached on (571) 272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

14.   Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Craig E Walter
Examiner
Art Unit 2188

CEW

HYUNG SOUGH
SUPERVISOR

4-11-07